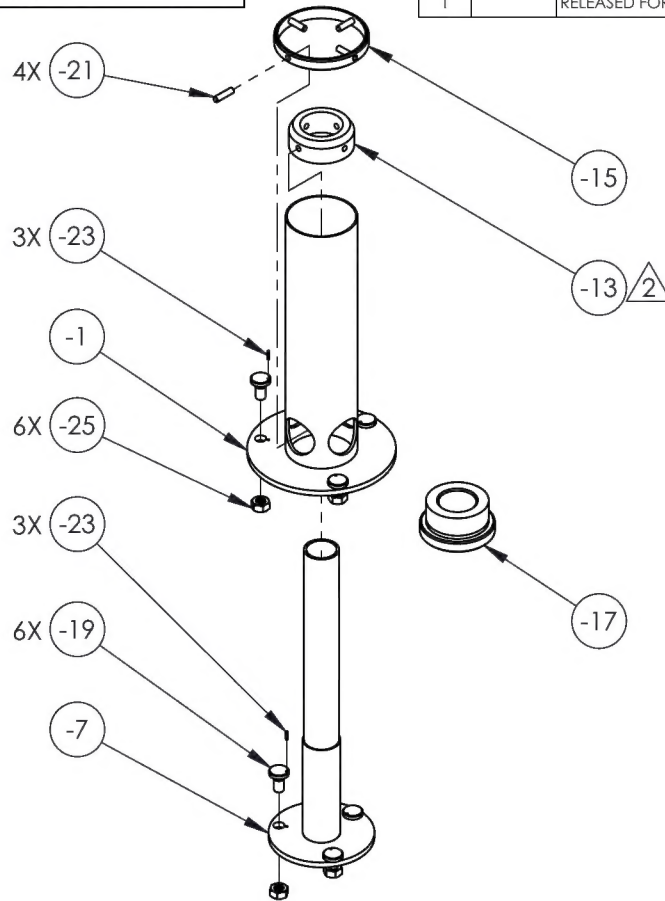


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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		RELEASED FOR PRODUCTION	9/19/2016	SM	JAG



NOTES:

1. REF AIRBUS T/N: 105-60101W4.

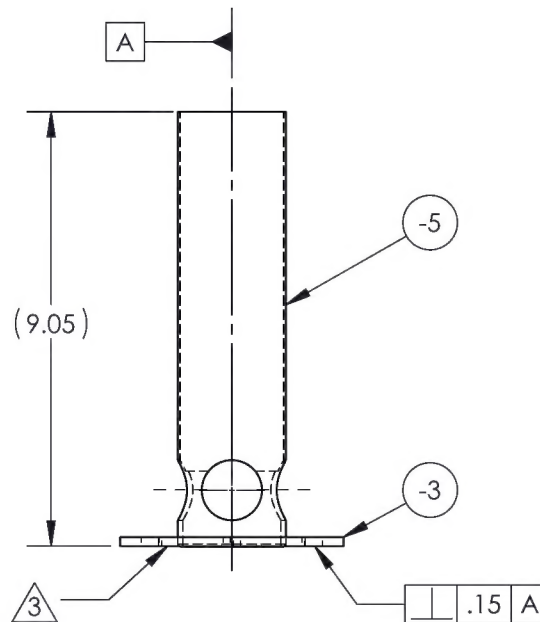
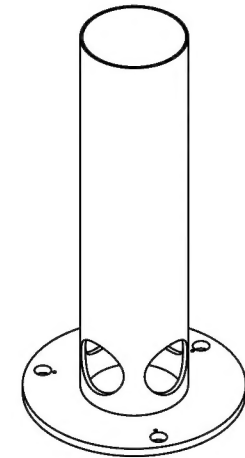
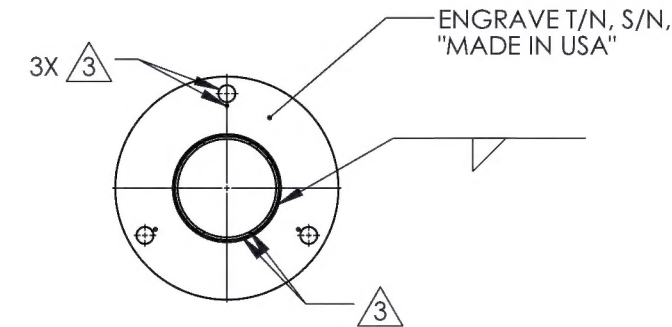
2 TIGHT FIT TO -1, CAN MOVE USING -15.

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
	X		-1	1	OUTER WELDMENT			2
	1		-3		OUTER PLATE	A36/1018/1020 HR		3
	1		-5		OUTER TUBE	STEEL		4
X			-7	1	INNER WELDMENT			5
1			-9		INNER PLATE	A36/1018/1020 HR		6
1			-11		INNER TUBE	STEEL		7
			-13	1	INNER ALIGNMENT BUSHING	A36/1018/1020 HR		8
			-15	1	RING	A36/1018/1020 HR		9
			-17	1	OUTER ALIGNMENT BUSHING	A36/1018/1020 HR		10
			-19	6	FASTENER	4140/4142		11
		B/O	-21	4	DOWEL PIN	S.S.	Ø3/16 x 3/4 (MCMaster-CARR # 97395A471)	1
		B/O	-23	6	SMALL DOWEL PIN	S.S.	Ø1/16 x 5/16 (MCMaster-CARR # 97395A403)	1
		B/O	-25	6	NUT	STEEL	M8 x 1.25 (MCMaster-CARR # 90591A161)	1
ASSY -7	ASSY -1							

TITLE	
ENGINE ALIGNMENT DEVICE	
DWG NO.	REV
RBE105-60101W4	1
MAT'L	UNLESS OTHERWISE SPECIFIED
HEAT TREAT FINISH	DIMENSIONS ARE IN INCHES
SPEC	.XXX ± .005 FRACTIONS ± 1/8
	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125°
DRAWN BY:	MACKOVJAK
CHECKED:	CLOUGH
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
SCALE	1:6
DATE	7/29/2016
SHEET 1 OF 11	

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REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



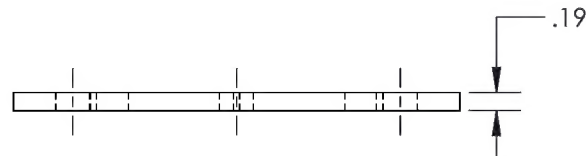
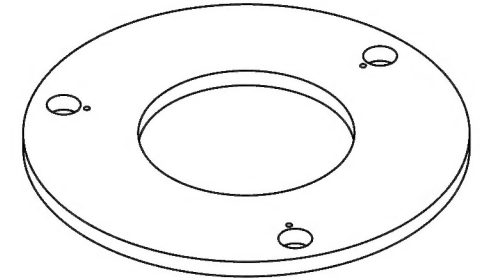
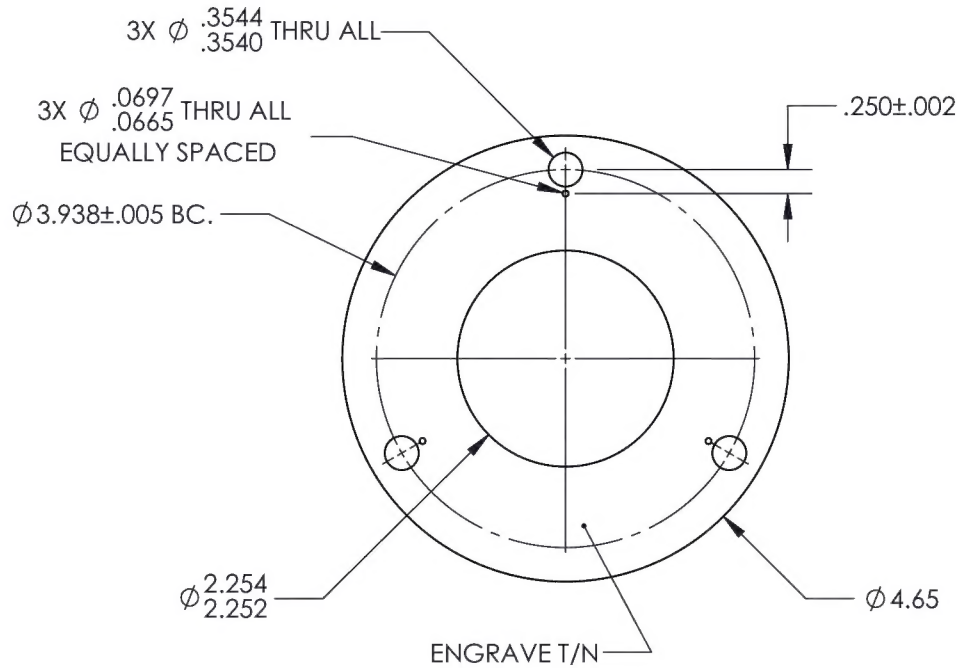
(-1)
OUTER WELDMENT

- NOTES:
DUAL FINISH:
1. ZINC PLATE: ASTM B633 TYPE I SC2
2. POWDER COAT YELLOW: FED #13538
3. NO POWDER COAT ON SURFACE.

DART AEROSPACE																															
TITLE ENGINE ALIGNMENT DEVICE																															
DWG NO. RBE105-60101W4-1	REV 1																														
<table border="1"> <tr> <td>MAT'L</td> <td>UNLESS OTHERWISE SPECIFIED</td> </tr> <tr> <td>HEAT TREAT</td> <td>DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>FINISH SEE NOTES</td> <td>.XXX ± .010 FRACTIONS ± 1/8</td> </tr> <tr> <td>SPEC</td> <td>.XX ± .03 ANGLES ± 1°</td> </tr> <tr> <td></td> <td>.X ± .1 SURFACES = 125</td> </tr> <tr> <td>DRAWN BY: MACKOVJAK</td> <td>1. BREAK ALL SHARP EDGES</td> </tr> <tr> <td>CHECKED: CLOUGH</td> <td>.015 x 45° OR .015R</td> </tr> <tr> <td>OPPS APPR: ANDERSON</td> <td>2. DIMENSIONAL LIMITS APPLY</td> </tr> <tr> <td>QA APPR: LINDSAY</td> <td>AFTER PLATING</td> </tr> <tr> <td>APPROVED: GILBERT</td> <td>3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009</td> </tr> <tr> <td>SCALE</td> <td>USED ON MODEL</td> </tr> <tr> <td>1:4</td> <td>H145</td> </tr> <tr> <td>DATE</td> <td></td> </tr> <tr> <td>7/28/2016</td> <td></td> </tr> <tr> <td colspan="2">SHEET 2 OF 11</td> </tr> </table>		MAT'L	UNLESS OTHERWISE SPECIFIED	HEAT TREAT	DIMENSIONS ARE IN INCHES	FINISH SEE NOTES	.XXX ± .010 FRACTIONS ± 1/8	SPEC	.XX ± .03 ANGLES ± 1°		.X ± .1 SURFACES = 125	DRAWN BY: MACKOVJAK	1. BREAK ALL SHARP EDGES	CHECKED: CLOUGH	.015 x 45° OR .015R	OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY	QA APPR: LINDSAY	AFTER PLATING	APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	SCALE	USED ON MODEL	1:4	H145	DATE		7/28/2016		SHEET 2 OF 11	
MAT'L	UNLESS OTHERWISE SPECIFIED																														
HEAT TREAT	DIMENSIONS ARE IN INCHES																														
FINISH SEE NOTES	.XXX ± .010 FRACTIONS ± 1/8																														
SPEC	.XX ± .03 ANGLES ± 1°																														
	.X ± .1 SURFACES = 125																														
DRAWN BY: MACKOVJAK	1. BREAK ALL SHARP EDGES																														
CHECKED: CLOUGH	.015 x 45° OR .015R																														
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY																														
QA APPR: LINDSAY	AFTER PLATING																														
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009																														
SCALE	USED ON MODEL																														
1:4	H145																														
DATE																															
7/28/2016																															
SHEET 2 OF 11																															

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				APPROVED



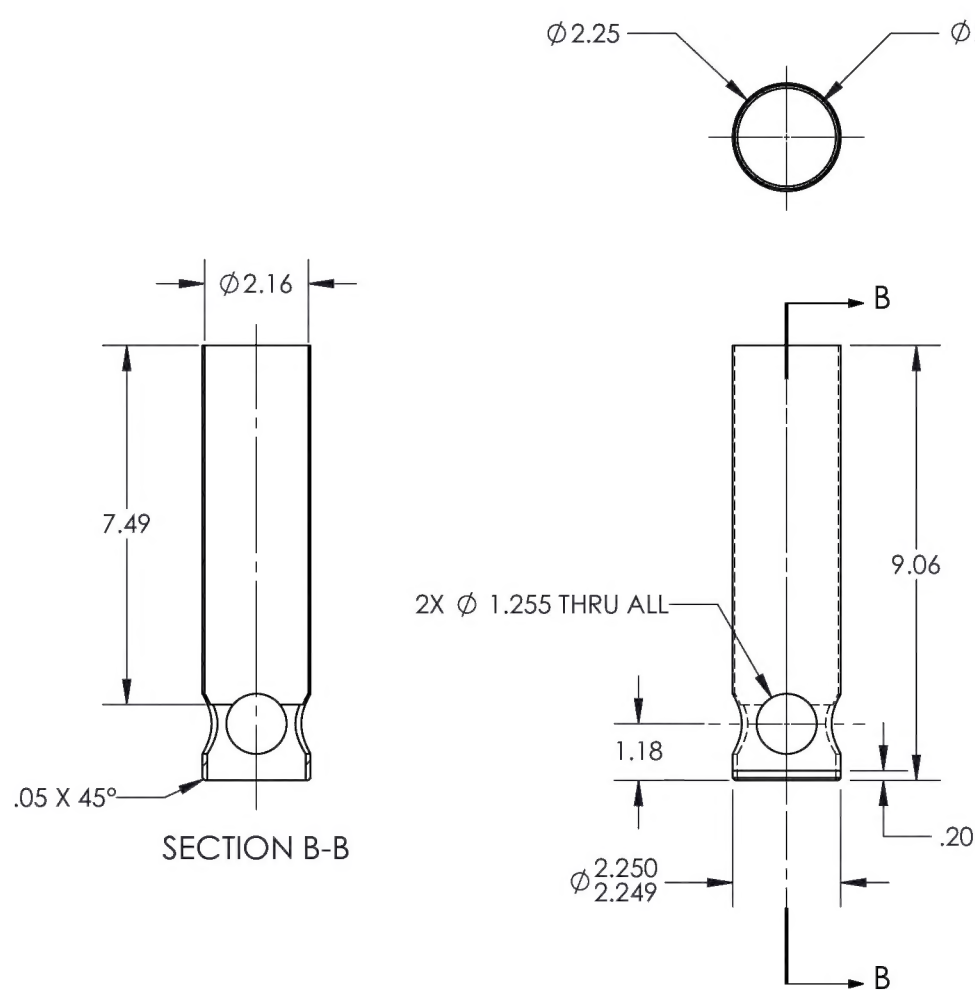
(-3)

OUTER PLATE

DART AEROSPACE	
TITLE ENGINE ALIGNMENT DEVICE	
DWG NO. RBE105-60101W4-3	REV 1
MAT'L A36/1018/1020 HR HEAT TREAT FINISH SEE -1 SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX \pm .010 FRACTIONS \pm 1/8 .XX \pm .03 ANGLES \pm 1° .X \pm .1 SURFACES = 125° ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: MACKOVJAK	USED ON MODEL
CHECKED: CLOUGH	H145
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:2	DATE 7/28/2016
SHEET 3 OF 11	

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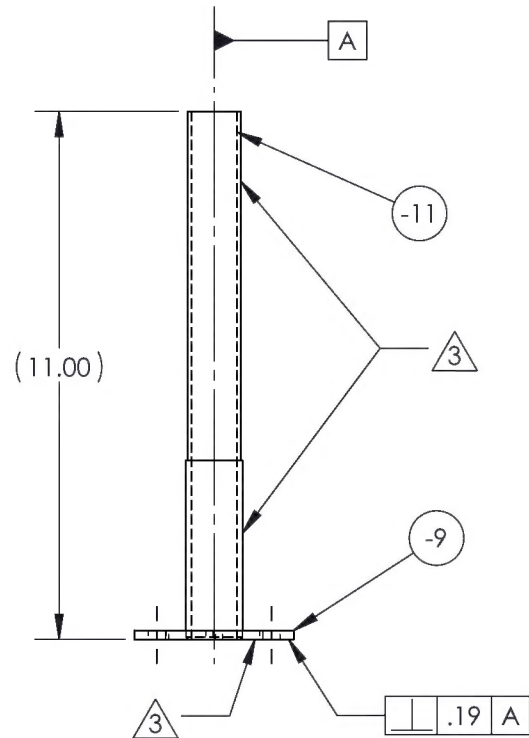
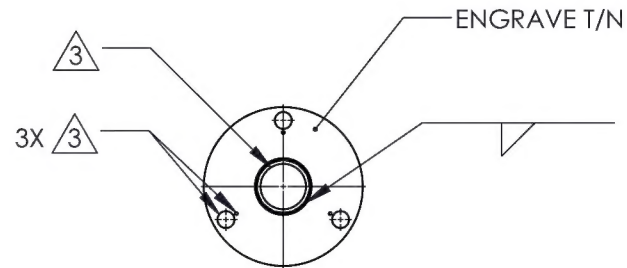
DART AEROSPACE	
TITLE ENGINE ALIGNMENT DEVICE	
DWG NO. RBE105-60101W4-5	REV 1
MAT'L STEEL HEAT TREAT FINISH SEE -1 SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: MACKOVJAK CHECKED: CLOUGH OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
USED ON MODEL H145	
SCALE 1:4	DATE 7/28/2016
SHEET 4 OF 11	

(-5)

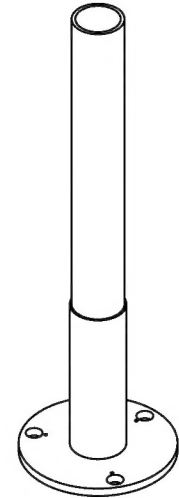
OUTER TUBE

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				APPROVED



(-7)
INNER WELDMENT

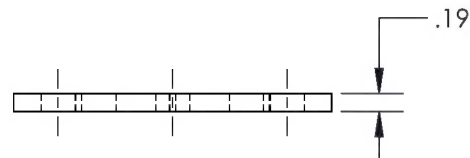
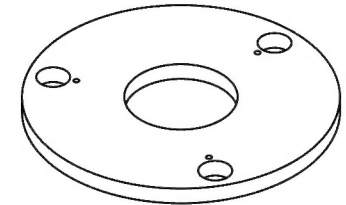
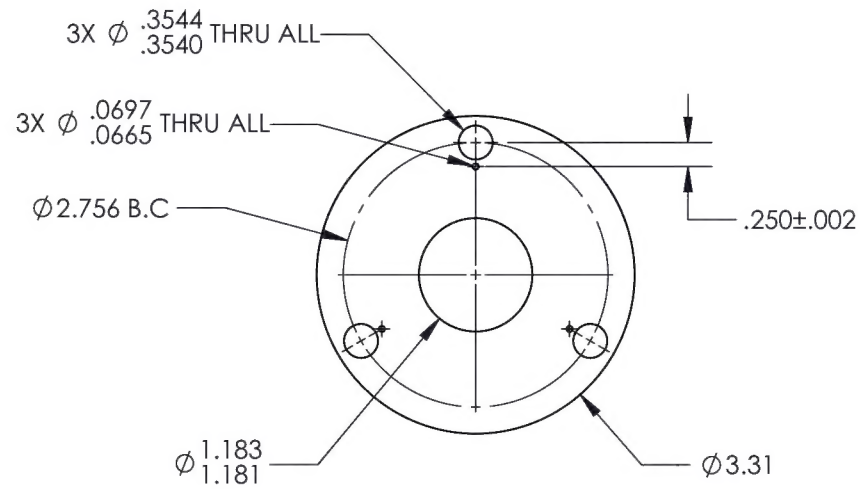


- NOTES:
DUAL FINISH:
1. ZINC PLATE: ASTM B633 TYPE I SC2
2. POWDER COAT YELLOW: FED #13538
3. NO POWDER COAT ON SURFACE.

DART AEROSPACE	
TITLE ENGINE ALIGNMENT DEVICE	
DWG NO. RBE105-60101W4-7	REV 1
MAT'L SEE NOTES	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ± 1/8 ANGLES ± 1° SURFACES = 125
DRAWN BY: MACKOVJAK	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: CLOUGH	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL H145
APPROVED: GILBERT	
SCALE 1:4	DATE 7/28/2016
SHEET 5 OF 11	

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				APPROVED



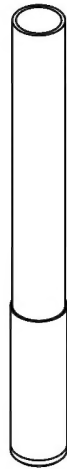
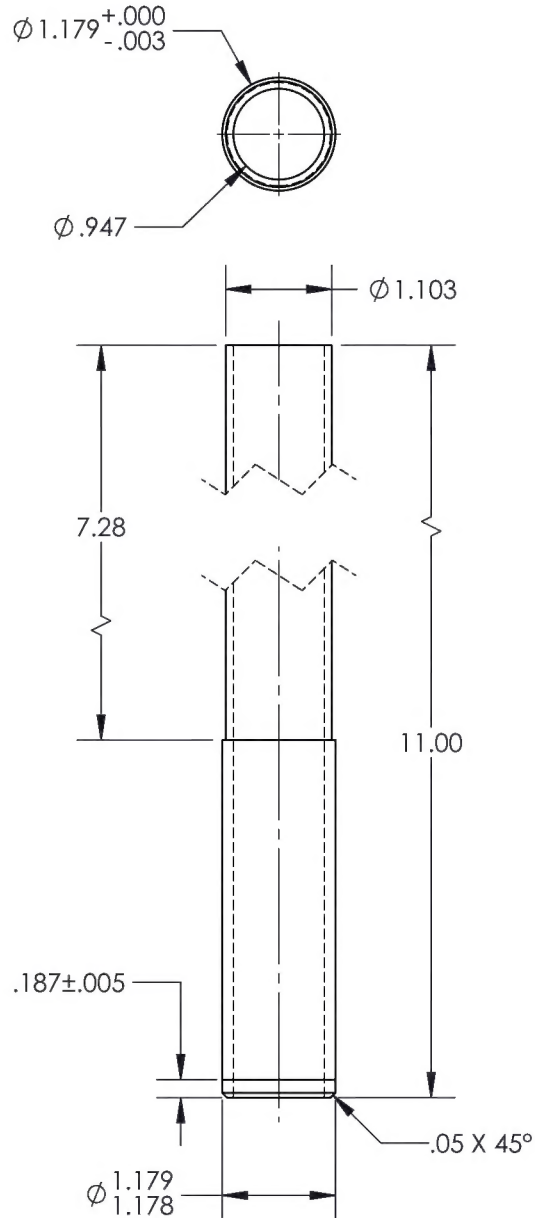
(-9)

INNER PLATE

DART AEROSPACE	
TITLE ENGINE ALIGNMENT DEVICE	
DWG NO. RBE105-60101W4-9	REV 1
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -7	.XXX \pm .010 FRACTIONS \pm 1/8
SPEC	.XX \pm .03 ANGLES \pm 1°
DRAWN BY: MACKOVJAK	.X \pm .1 SURFACES = 125
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:2	DATE 7/28/2016
SHEET 6 OF 11	

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				APPROVED

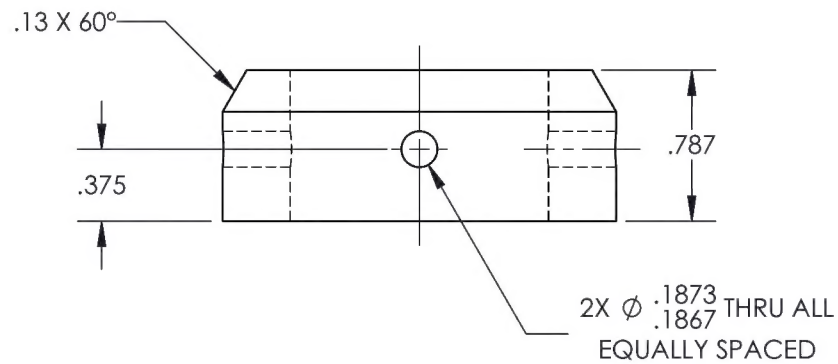
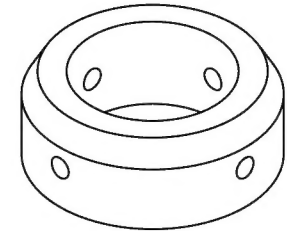
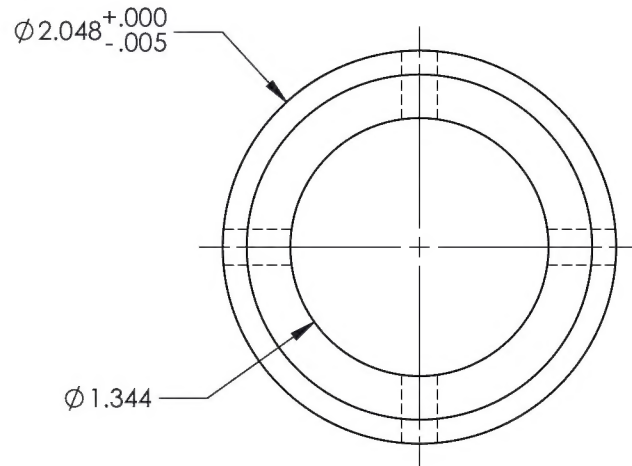


(-11)
INNER TUBE

DART AEROSPACE	
TITLE ENGINE ALIGNMENT DEVICE	
DWG NO. RBE105-60101W4-11	REV 1
MAT'L STEEL	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -7	.XXX \pm .010 FRACTIONS \pm 1/8
SPEC	.XX \pm .03 ANGLES \pm 1°
	.X \pm .1 SURFACES = 125
DRAWN BY: MACKOVJAK	1. BREAK ALL SHARP EDGES
CHECKED: CLOUGH	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	H145
SCALE 1:2	DATE 7/28/2016
	SHEET 7 OF 11

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				APPROVED



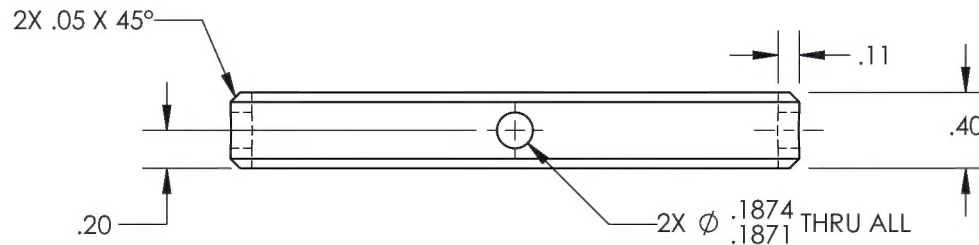
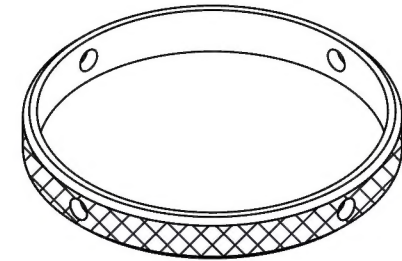
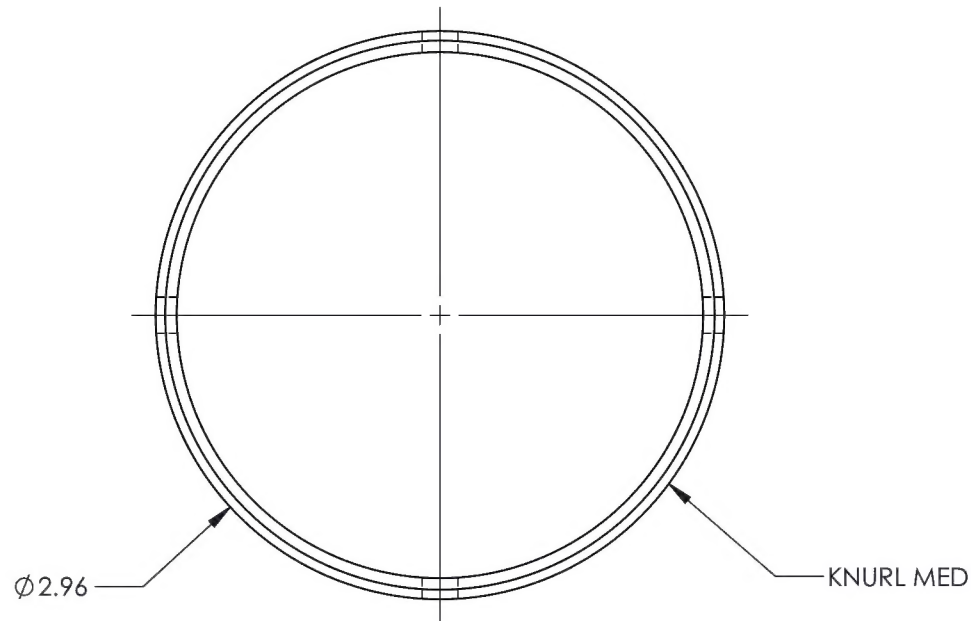
(-13)

INNER ALIGNMENT BUSHING

DART AEROSPACE	
TITLE ENGINE ALIGNMENT DEVICE	
DWG NO. RBE105-601-60101W4-13	REV 1
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH ZINC PLATE	.XX ± .01 ANGLES ± 5°
SPEC ASTM B633 TYPE I SC 2	.X ± .1 SURFACES = 125
DRAWN BY: MACKOVJAK	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: CLOUGH	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	H145
SCALE 1:1	DATE 7/28/2016
SHEET 8 OF 11	

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REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



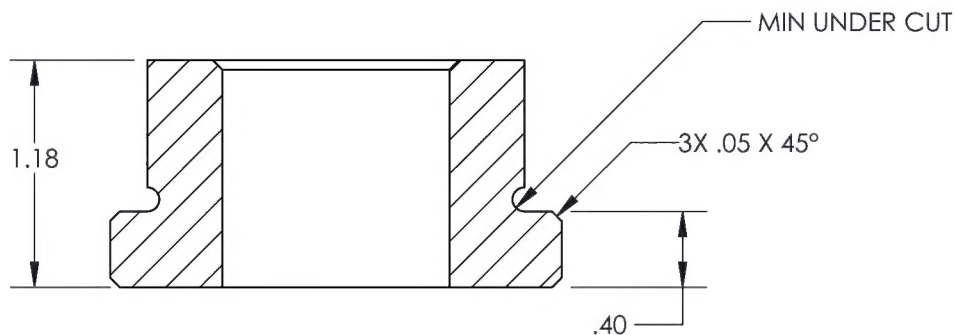
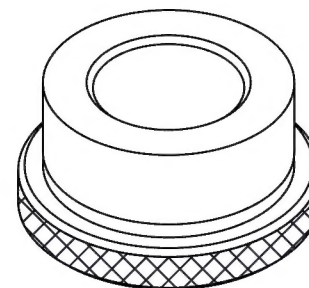
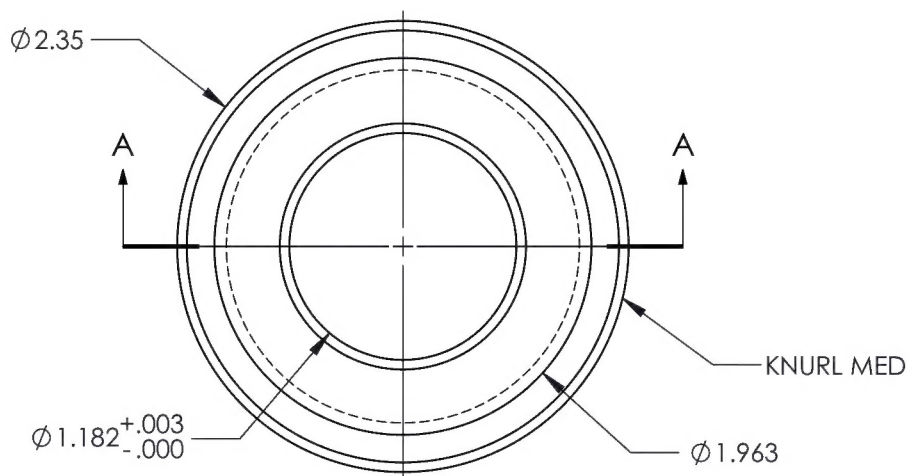
(-15)

RING

DART AEROSPACE	
TITLE ENGINE ALIGNMENT DEVICE	
DWG NO. RBE105-60101W4-15	REV 1
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH ZINC PLATE	.XXX \pm .005 FRACTIONS \pm 1/8
SPEC ASTM B633 TYPE I SC 2	.XX \pm .01 ANGLES \pm 5°
DRAWN BY: MACKOVJAK	.X \pm .1 SURFACES = 125
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
	USED ON MODEL
	H145
SCALE 1:1	DATE 7/29/2016
	SHEET 9 OF 11

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				APPROVED



SECTION A-A

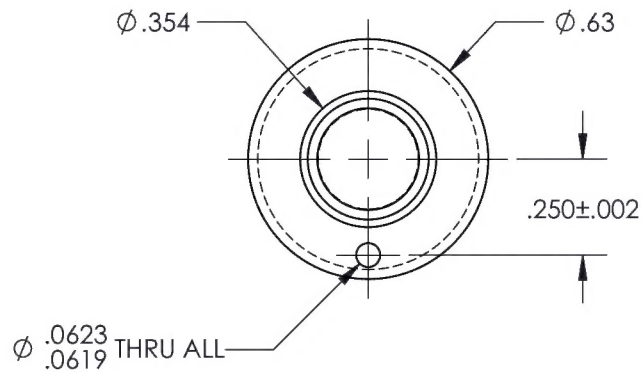
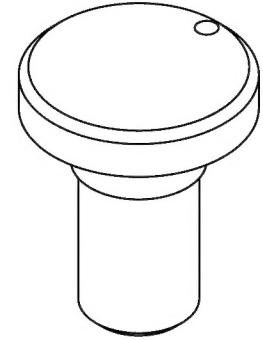
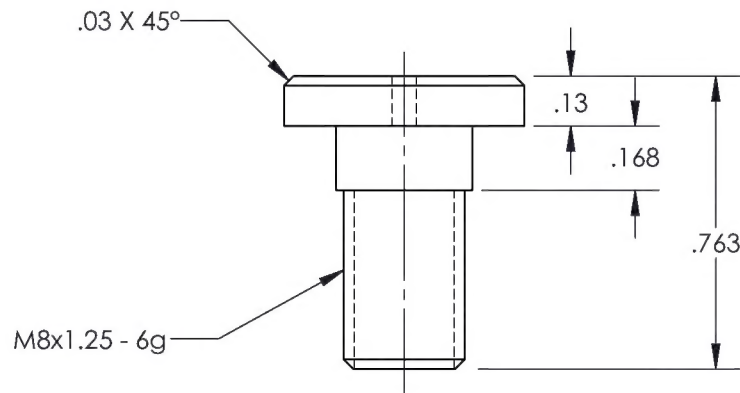
(-17)

OUTER ALIGNMENT BUSHING

DART AEROSPACE	
TITLE ENGINE ALIGNMENT DEVICE	
DWG NO. RBE105-60101W4-17	REV 1
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH ZINC PLATE	.XXX \pm .005 FRACTIONS \pm 1/8
SPEC ASTM B633 TYPE I SC 2	.XX \pm .01 ANGLES \pm .5°
DRAWN BY: MACKOVJAK	.X \pm .1 SURFACES = 125
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
	USED ON MODEL
	H145
SCALE 1:1	DATE 7/29/2016
	SHEET 10 OF 11

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REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



(-19)
FASTENER

DART AEROSPACE	
TITLE ENGINE ALIGNMENT DEVICE	
DWG NO. RBE105-60101W4-19	REV 1
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT RC 28-34	DIMENSIONS ARE IN INCHES
FINISH ZINC PLATE	.XXX ± .005 FRACTIONS ± 1/8
SPEC ASTM B633 TYPE I SC 2	.XX ± .01 ANGLES ± 5°
DRAWN BY: MACKOVJAK	.X ± .1 SURFACES = 125/
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 2:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 7/29/2016	USED ON MODEL
SHEET 11 OF 11	H145